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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,269	10/17/2001	Benoit Mory	PHFR 000110	7787

24737 7590 06/01/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
STEVENS, ROBERT	
ART UNIT	**PAPER NUMBER**
2176	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/982,269	MORY ET AL.	
	Examiner	Art Unit	
	Robert Stevens	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: amendment filed 2/22/2006.

2. This action is **FINAL**.

3. The Office withdraws the previous objections to the specification (for minor claim informalities).

4. The Office maintains the rejections of the claims under 35 U.S.C. § 103(a), in light of the amendment.

5. Claims 1-10 are pending. Claims 1, 3, 5-6 and 9-10 are independent.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 1-10 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Buford et al (International Application No. PCT/US97/04574, filed Mar. 17, 1997 and published as

International Publication No. WO 97/34240 on Sep. 18, 1997, hereafter referred to as "Buford") in view of Simon North et al. (Sam's Teach Yourself XML in 21 Days, Sam's Publishing, Indianapolis, IN, Mar. 1999, p. 105, hereafter referred to as "North").

Regarding independent claim 1, Buford discloses:

An encoding method for encoding a description element of an instance of a markup language schema defining a hierarchical structure of description elements, said hierarchical structure comprising hierarchical levels, parent description elements and child description elements, said description element to be encoded comprising a content (p. 9 lines 17-20 and p. 11 lines 19-24), *characterized in that it consists in:*

providing a table ... (p. 9 lines 20-21) , *said table containing identification information for solely identifying each description element in a hierarchical level* (p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4) , *and structural information for retrieving any child description element from its parent description element,* (p. 12 lines 5-16)

scanning a hierarchical memory representation of said instance from parent description elements to child description elements until reaching the description element to be encoded, and retrieving the identification information of each scanned description element, (Abstract and p. 9 lines 20-24)

encoding said description element to be encoded as a fragment comprising said content and a sequence of the retrieved identification information. (Abstract and p. 9 lines 17-21)

However, Buford does not explicitly disclose:

...

... *derived from said schema,* ... ,

.. ,

... .

North, though, discloses:

...

... *derived from said schema,* ... , (p.105 "Developing the DTD" section)

.. ,

... .

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding claim 2, which is dependent upon claim 1,

Buford discloses:

> *characterized in that when a description element is defined ... as possibly having multiple occurrences, said table further comprises for said description element an occurrence information for indicating that said description element may have multiple occurrences in an instance, and when an occurrence having a given rank is scanned during the encoding, the corresponding retrieved identification information is indexed with said rank.* (Fig. 4 and p. 20 lines 15-28)

However, Buford does not explicitly disclose:

> ... *in the schema* ... , ...

North, though, discloses:

> ...
> ... *in the schema* ... , ... (p.105 "Developing the DTD" section)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the

DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding independent claim 3, Buford discloses:

A decoding method for decoding a fragment comprising a content and a sequence of identification information (Abstract), *characterized in that it consists in:*

using at least one table derived from a markup language ... (Abstract in context of p. 9 lines 20-21), ... *defining a hierarchical structure of description elements comprising hierarchical levels, parent description elements and child description elements, said table containing identification information for solely identifying each description element in a hierarchical level* (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), *and structural information for retrieving any child description element from its parent description element,* (Abstract in context of p. 12 lines 5-16)

scanning said sequence identification information by identification information, (p. 20 lines 15-22)

at each step searching in said table for the description element associated to the current identification information and adding said description element to a hierarchical memory representation of an instance ... if not already contained in said hierarchical memory representation, (p. 18 line 22 – p. 19 line 7)

adding said content to the description element of said hierarchical memory representation that is associated to the last identification information of said sequence. (Abstract, p. 19 lines 3-7)

However, Buford does not explicitly disclose:

...

... schema, said schema ... ,

... ,

... of said schema ... ,

... .

North, though, discloses:

...

... *schema, said schema* ... , (p.105 "Developing the DTD" section)
... ,
... *of said schema* ... , (p.105 "Developing the DTD" section)
... .

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding claim 4, which is dependent upon claim 3,

Buford discloses:

> *characterized in that when a description element is defined ... as possibly having multiple occurrences, said table further comprises for said description element an occurrence information for indicating that said description element may have multiple occurrences in an instance, and when said sequence comprises an indexed identification information, said index is interpreted as an occurrence rank for the associated description element, same description element(s) of lower rank(s) being added to said hierarchical memory representation if not already contained in it.* (p. 20 lines 15-28)

However, Buford does not explicitly disclose:

... *in the schema* ... .

North, though, discloses:

... *in the schema* ... . (p.105 "Developing the DTD" section)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding independent claim 5, Buford discloses:

> *An encoder for encoding a description element of an instance of a markup language schema defining a hierarchical structure of description elements, said hierarchical structure comprising hierarchical levels, parent description elements and child description elements, said description element to be encoded comprising a content* (p. 9 lines 17-20 and p. 11 lines 19-24), *characterized in that it comprises:*
>
> > *a memory for storing at least one table* ... (Fig. 1 #31, 37), *said table containing identification information for solely identifying each description element in a hierarchical level, and structural information for retrieving any child description element from its parent description element* (p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 16),
> >
> > *computing means* (Fig. 1 #26, 22, 24, 45, 47) *for scanning said instance from parent description elements to child description elements until reaching the description element to be encoded, and retrieving the identification information of each scanned description element* (Abstract and p. 9 lines 20-24), *and for encoding said description element to be encoded as a fragment comprising said content and a sequence of the retrieved identification information.* (Abstract and p. 9 lines 17-21)

However, Buford does not explicitly disclose:

> ...
>
> > ... *derived from said schema,* ... ,
> >
> > ... .

North, though, discloses:

> ...

... *derived from said schema,* ... , (p.105 "Developing the DTD" section) ... .

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding independent claim 6, Buford discloses:

A decoder for decoding a fragment comprising a content and a sequence of identification information (Abstract), *characterized in that the decoder comprises:*

a memory for storing at least one table derived from a markup language schema (Fig. 1 #31, 37), *said schema defining a hierarchical structure of description elements comprising hierarchical levels, parent description elements and child description elements, said table containing identification information for solely identifying each description element in a hierarchical level, and structural information for retrieving any child description element from its parent description element,* (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 16)

computing means for: (Fig. 1 #26, 22, 24, 45, 47)

scanning said sequence identification information by identification information (p. 20 lines 15-22), *at each step searching in said table for the description element associated to the current identification information and adding said description element to a hierarchical memory representation of an instance ... if not already contained in said hierarchical memory representation,* (p. 18 line 22 – p. 19 line 7)

adding said content to the description element of said hierarchical memory representation that is associated to the last identification information of said sequence. (Abstract, p. 19 lines 3-7)

However, Buford does not explicitly disclose:

...

... ,
computing means for:
... *of said schema* ...,
... .

North, though, discloses:

...

... ,
computing means for:
... *of said schema* ..., (p.105 "Developing the DTD" section)
... .

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Claim 7 is directed to a computer system for implementing the system of claim 5. As such, this claim is substantially similar to claim 5, and therefore likewise rejected.

Claim 8 is directed to a computer system for implementing the system of claim 6. As such, this claim is substantially similar to claim 6, and therefore likewise rejected.

Regarding independent claim 9, Buford discloses:

> *A data transmission system, the data transmission system includes a signal for transmission over a transmission network comprising an encoder and a decoder having a memory storing at least one table derived from markup language* (Abstract, Fig. 1, p. 4 lines 1-21) ... , *said markup language ... defining a hierarchical structure of description elements* (Abstract in context p. 9 lines 20-21), *said hierarchical structure comprising hierarchical levels, parent description elements and child description elements* (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), *said table containing identification information for solely identifying each description element in a hierarchical level* (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), *and structural information for retrieving any child description element from its parent description element,* (p. 12 lines 5-16)
>
> *wherein said signal includes at least one fragment representing a content of an encoded description element* (Abstract and p. 9 lines 17-21), *and a sequence of identification information being associated in said table to said encoded description element and at least one parent description element* (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 16), *wherein the sequence of identification information is usable by the decoder as a key to decode the encoded description element.* (Abstract)

However, Buford does not explicitly disclose:

> ... *schema, ... schema ...* ,
> ... .

North, though, discloses:

> ... *schema, ... schema ...* , (p.105 "Developing the DTD" section)
> ... .

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the

DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding independent claim 10, Buford discloses:

> *A computer program product comprising a computer useable medium having computer readable program code embodied therein for reporting on performance of a plurality of parameters* (Abstract), *the program product comprising:*
>
> *program code configured to implement a decoder having a table for updating a hierarchical memory representation of an instance of a markup language* ... (Abstract in context of p. 9 lines 20-21) , *said markup language ... defining a hierarchical structure of description elements* (Abstract in context of p. 9 lines 20-21), *said hierarchical structure comprising hierarchical levels, parent description elements and child description elements* (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), *characterized in that the table is derived from said markup language* ... (p. 11 line 19 – p. 12 line 4), *and the table contains identification information for solely identifying each description element in a hierarchical level* (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), *and structural information for retrieving any child description element from its parent description element.* (p. 12 lines 5-16)

However, Buford does not explicitly disclose:

> ...
> ... *schema, ... schema ... schema, ...*

North, though, discloses:

> ...
> ... *schema, ... schema ... schema, ...* (p.105 "Developing the DTD" section)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the

DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Response to Arguments

8. Applicant's arguments have been fully considered but they are not persuasive. It is noted that the amendment substantially changes the scope of the claimed subject matter.

The Applicant argues on pages 8-9 that the references do not disclose a table containing identification information and structural information.

The Office respectfully disagrees. It is noted that Applicant omits the claimed language that qualified structural information as "for retrieving any child description from its parent". At least the cited Buford reference discloses the use of at least one table containing identification information. For example, see refer to page 15 lines 10-15 which discusses identifier fields and a filed for identifying a first child and the number of children. Further, it is noted that there is a field which identifies a first child. I.e., there is explicit "structural information" in that tree for identifying the first child element. Additionally, Buford teaches the use of a field for the number of children and a child table to locate the other child elements. Whether such "structural" information is explicitly stored or calculated via indirection was merely an obvious variant.

The Applicant argues on pages 9-10 that the references are deficient because they do not disclose encoding into raw binary data in storage cells, for example.

The Office respectfully disagrees. The Office notes that the claims do not recite encoding into raw binary data in storage cells, for example.

The Applicant argues on page 10 that the references are deficient because they do not scan a hierarchical memory representation of an instance from parent to child until reaching the element to be encoded.

The Office respectfully disagrees. Tree processing, including scanning or searching through nodes of a tree was well-known to one of ordinary skill in that art at the time of the Applicant's subject matter. The specific data object represented as a node in a tree abstraction or model of that data is merely an obvious variant. Further, both references discuss tree processing.

The Applicant argues on page 10 that the references are deficient because they do not disclose searching in a table for the element associated with the current information and adding that element to the hierarchical memory representation.

The Office respectfully disagrees. Tree processing, including searching through nodes of a tree, and adding/deleting nodes to/from the tree was well-known to one of ordinary skill in that art at the time of the Applicant's subject matter. The specific data object represented as a node

in a tree abstraction or model of that data is merely an obvious variant. Further, both references discuss tree processing.

For these reasons, the Office asserts the rejections under 35 USC 103(a) as set forth above.

Conclusion

9. **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Additionally, the main number for Technology Center 2100 is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Stevens
Art Unit 2176
Date: May 19, 2006

rs

William L. Bashore
WILLIAM BASHORE
PRIMARY EXAMINER